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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/755,383	01/13/2004	Sio Kuan Lam	20229.0009	9958
23517	7590	04/13/2005	EXAMINER	
SWIDLER BERLIN LLP			DOAN, JENNIFER	
3000 K STREET, NW			ART UNIT	
BOX IP			PAPER NUMBER	
WASHINGTON, DC 20007			2874	

DATE MAILED: 04/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/755,383

Applicant(s)

LAM ET AL.

Examiner

Jennifer Doan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s).

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings, filed on 01/13/2004, are accepted.

Specification

2. Applicants' cooperation is requested in correcting any errors of which applicants may become aware in the specification.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of

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35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1-9 and 12-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshihiro et al. (JP 07-270642) in view of Brauss (U.S. Patent 3,628,027).

With respect to claims 1-4, 8 and 12-19, Yoshihiro et al. (figure 1) disclose an optical assembly for coupling an optical device to an optical receiver, comprising a lens (7) comprising a reflecting surface (8) for bending and confining a light beam and a focusing curved surface for focusing the light beam, the lens conveying the light beam between the optical device and the optical receiver by reflection off of the reflecting curved surface and transmission through the focusing curved surface; wherein the reflecting surface and the focusing spherical surface are part of an integrated lens; wherein the reflecting curved surface controls the divergence angle of the reflected beam before being focused by the focusing curved surface (see figure 1); wherein the reflective portion of at least one of the mating surfaces includes a coating to create reflection of the beam; wherein the optical device is a light device (3) and the optical receiver is an optical fiber (1) for sending out the light; further the optical device is an optical fiber (6) and the optical receiver is a light receiving device (3); wherein the curved focusing surface is a spherical surface; further wherein the reflecting surface internally reflects the beam into the material that comprises the lens; wherein the curved reflecting surface externally reflects the beam off of the material that comprises the lens; wherein the reflecting surface bends the light

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beam 90 degree (see figure 1); and further wherein the reflecting surface collimates the light beam after the reflection (specification).

Yoshihiro et al. do not disclose the reflective surface is curved and parabolic.

However, Brauss (figure 1 and column 1, lines 34-36) discloses the beam reflecting and focusing system including a lens having a reflective curved-parabolic surface (13). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the lens system of Yoshihiro to include the reflective surface which is curved and parabolic (accordance with the teaching of Brauss) for the purpose of obtaining the most effective light reflection.

With respect to claims 4 and 9, Yoshihiro et al. substantially disclose all the limitations of the claimed invention, except Yoshihiro et al. do not disclose a monitoring unit.

However, Brauss (figure 1 and column 1, lines 44-46) disclose a monitoring unit. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the lens system of Yoshihiro to include the monitoring unit (accordance with the teaching of Brauss) for the purpose of monitoring and controlling the system to ensure a reliable functioning of the system.

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With respect to claims 5-7, Yoshihiro et al. substantially disclose all the limitations of the claimed invention, except Yoshihiro et al. do not disclose the lens assembly having at least two mating parts.

However, Brauss (figure 1, abstract and column 2, lines 69-71) disclose the lens assembly having at least two mating parts. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the lens system of Yoshihiro to include two mating parts (accordance with the teaching of Brauss) for the purpose protecting against the external effects and ensuring a reliable function of the system.

6. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshihiro et al. and Brauss, as applied to claim 1 above, and further in view of Michikoshi et al. (U.S. Patent 5,388,171).

With respect to claims 10 and 11, the combination of Yoshihiro et al. and Brauss substantially disclose the invention as claimed.

Neither Yoshihiro et al. nor Brauss disclose a translucent block positioned between the lens and the end of the fiber. However, Michikoshi et al. (figure 1) clearly disclose a translucent block positioned between the lens (2) and the end of the fiber (3). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the device structure of the above combination by forming the translucent block between the lens and the fiber end (accordance with the teaching of Michikoshi et al.) for the purpose of alleviating the reflection noise.

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Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Doan whose telephone number is (571) 272-2346. The examiner can normally be reached on Monday to Thursday from 6:00 am to 3:30 pm, second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jennifer Doan
Patent Examiner
March 25, 2005